

Butterfly population trends.

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England, Wales and Northern Ireland

The graphs in this short report are taken from the UK Butterfly Monitoring Scheme (UKBMS) annual report 2022 (with permission).

Figure 4

Wider countryside species (blue)

The wider countryside species the smoothed values butterfly population (blue) show a slight increase from 1976 to about 1992 then a gentle decline and appears to be stable through the last 10 years or in fact increasing if an imaginary line is drawn through the annual data from 2008 to 2022. The annual data is quite variable. The year when recording started, 1976, is known to have been a very warm summer and the count made in that year has been used as the 100-index value. This perhaps explains the rather odd start to the graphs.

Habitat specialist (orange)

The trend line starts about 58 but quickly falls to around 40 and is stable at that level.

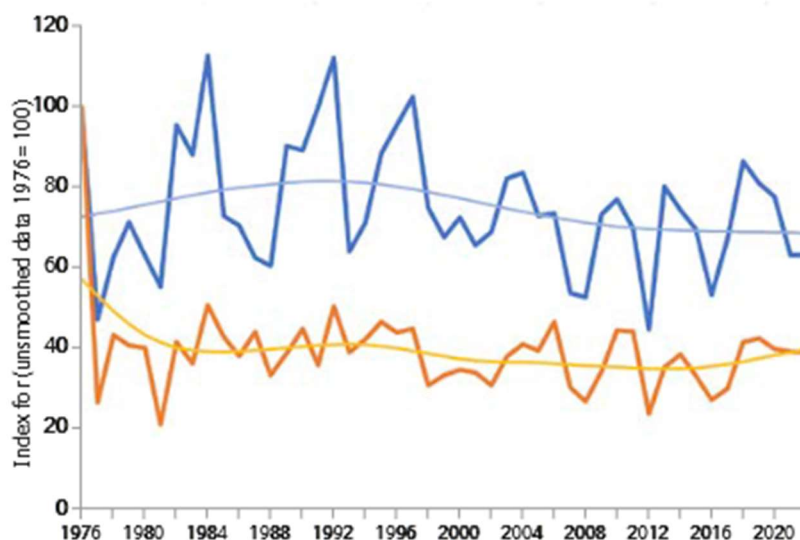


Figure 4. Composite indicators of UK butterfly populations for wider countryside species (blue) and habitat specialists (orange) 1976–2022. Darker lines are unsmoothed values, paler lines are smoothed indicators.

Figure 5

Wider countryside species on farmland (green)

The green indicators show that there has been a gentle fall in numbers from 1990 to about 2010 where the smooth value is about 90 and since then the trend is a slight increase.

Woodland species (purple)

The trend shows quite a dramatic fall from 100 to 50 from 1990 to 2012 but since then the trend is stable.

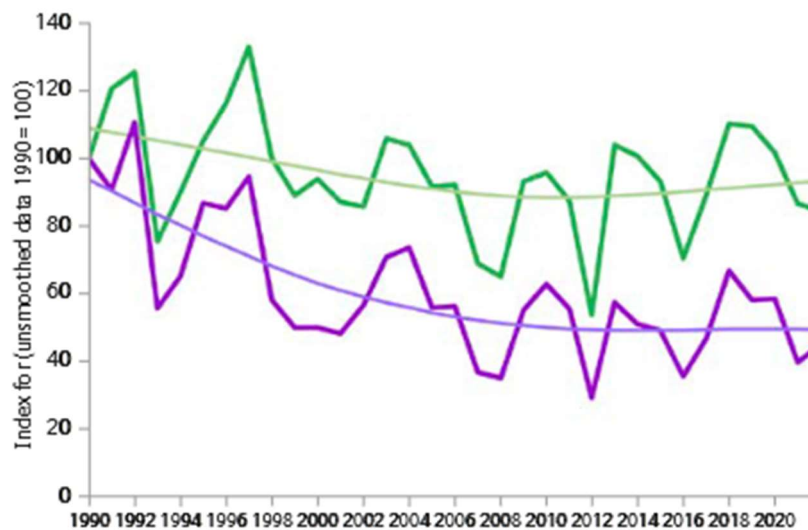


Figure 5. Composite indicators of butterfly populations for wider countryside species on farmland (green) and in woodland (purple) in England 1990–2022. Darker lines are unsmoothed values, paler lines are smoothed indicators.

These trends contrast significantly with the bird population changes where the farmland species of birds dropped from 100 to 40 from 1976 to 1990 and continued to drop but at a slower rate. The woodland bird population in England has reduced but not to same extent as the butterfly population.

Scotland

Figure 6

Generalist species (blue)

The general species show a steady increase from the beginning of data collection with the trend line moving from 80 in 1979 to 120 in 2022.

Habitat specialists (red)

The habitat specialists show a slight decline over the period from 75 in 1979 to 70 in 2022.

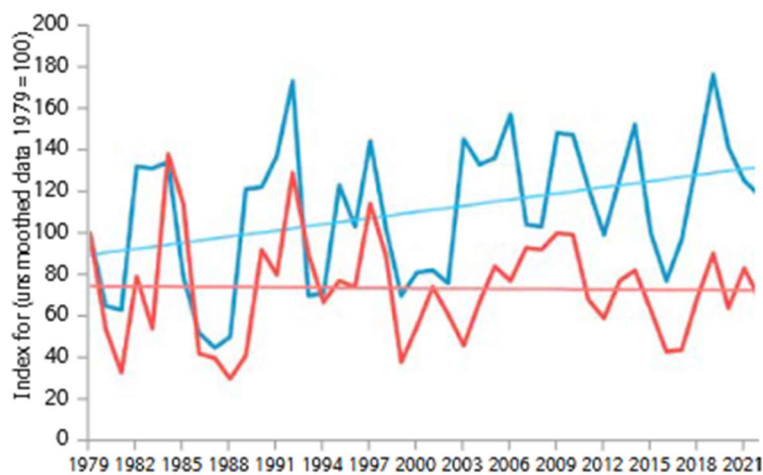


Figure 6. Composite Indicators of Scotland butterfly populations for generalist species (blue) and habitat specialists (red) 1979–2022. Darker lines are unsmoothed values, paler lines are smoothed indicators.

The trend lines here compliment the positive results for bird populations in Scotland.

Source:

UKBMS report for 2022.

Bird population change index as indicator of environment change.

Links to UKBMS and Government sources:

<https://ukbms.org/publications>

<https://jncc.gov.uk/our-work/official-statistic-on-abundance-of-uk-butterflies/>

<https://www.gov.uk/government/statistics/butterflies-in-the-wider-countryside-uk/butterflies-in-the-united-kingdom-and-in-england-1976-to-2024--2>